

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product name: Ricoh 406683 Toner Cartridge

Part number: RIC406683

1.2 IDENTIFIED USES AND USES ADVISED AGAINST

For use in: This mixture is a toner used in copiers/printers.

1.3 **SUPPLIER DETAILS**

Supplier: Clover Technologies Group

4200 Columbus Street. Ottawa, IL 61350 United States

Phone number: 815-431-8100

Fax: 815-461-8583

Contact Hours: 08:00AM-05:00PM CST

1.4 EMERGENCY TELEPHONE NUMBERS

Supplier: N/A

2. HAZARDS IDENTIFICATION

2.1 INFORMATION and CLASSIFICATION

Overview: The product is not classified according to the Globally Harmonized System (GHS). Classification

according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable. Information concerning particular hazards for human and environment: The product does not have to be labeled due to the calculation procedure of international guidelines. Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and

literature data.

2.2 **LABEL ELEMENTS**

Applicable Pictograms:

NO PICTOGRAM

Danger Indications: N/A
Risk Phrases: N/A
Safety Phrases: N/A

2.3 OTHER HAZARDS

PBT or vPvB: N/A

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^{*} This document provides safety-related information about toner contained in print cartridge for use in laser printer



3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS number	Weight %	OSHA	ACGIH	Other	
			PEL	TLV		
Polyester Resin	Proprietary	50-100			Non-hazardous components	
Triiron Tetraoxide	1317-61-9	2.5-10			Non-hazardous components	
Silica	Proprietary	2.5-10	20 mppcf	10 mg/m3	Non-hazardous components.	
			80 mg/m3		Amorphous Silica.	
Pigment	Proprietary	≤2.5			Non-hazardous components	
Ethlene Propylene	9010-79-1	≤2.5			Non-hazardous components	
Copolymer						
Carbon Black (bound)	1333-86-4	2.5-10	Long-term	Long-term	Dangerous components. REL: Long-	
			value: 3.5	value: 3	term value: 3.5 mg/m³ (0.1 in	
			mg/m³	mg/m³	presence of PAHs; See Pocket	
				(inhalable	Guide Apps. A+C).	
				fraction)		
Paraffin Waxes and	8002-74-2	2.5-10		Long-term	Dangerous components. REL: Long-	
Hydrocarbon Waxes				value: 2	term value: 2 mg/m³.	
				mg/m³		
			TWA: 15	TWA: 10	TRGS 900 (Luftgrenzwert) - 10	
			mg/m3	mg/m3	mg/m3 (Einatembare partikel), 3	
			(Total Dust),	(Inhalable	mg/m3 (Alveolengängige fraktion).	
			J.	Particulate),	j. , ,	
			(Respirable	3 mg/m3	Dust), 5 mg/m3 (Inhalable Dust).	
			Fraction)	(Respirable		
				Particulate)		

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest Directives.

This section provides composition information for the toner powder contained in specially designed container inside of the print cartridge.

4. FIRST-AID MEASURES

4.1 FIRST AID MEASURES

4.1.1

FIRST AID INSTRUCTIONS BY RELEVANT ROUTES OF EXPOSURE

Inhalation: Supply fresh air; consult doctor in case of complaints.

Eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Skin contact: Immediately wash with water and soap and rinse thoroughly. Generally the product does not

irritate the skin.

Ingestion: Drink copious amounts of water and provide fresh air. Immediately call a doctor.

4.1.2 ADDITIONAL FIRST AID INFORMATION

Additional first aid information: N/A

Immediate Medical Attention Required: No further relevant information available.

4.2 **SYMPTOMS AND EFFECTS**

Acute Symptoms from Exposure: No further relevant information available.

Delayed Symptoms from Exposure: No further relevant information available.

4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

No further relevant information available.

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5. FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Recommended Extinguishing Media: CO2, extinguishing powder or water spray. Fight larger fires with water spray or

alcohol resistant foam.

Extinguishing Media Not to be Used: No Information Available

5.2 **SPECIAL HAZARD**

Unusual Fire/Explosion Hazards: Like most finely divided organic powders, toner dust may form an explosive mixture in

air.

Extinguishing Media Not to be Used: N/A

5.3 ADVICE FOR FIRE FIGHTERS

Avoid inhalation of smoke. Wear protective cloting an wear self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1 PRECAUTIONS FOR NON-EMERGENCY PERSONNEL

Wear protective equipment. Keep unprotected persons away.

6.1.2 ADDITIONAL FIRST AID INFORMATION

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

6.1.3 PERSONAL PROTECTION

Wear personal protective equipment as described in Section 8.

6.2 **ENVIRONMENTAL PRECAUTIONS**

Regulatory Information: Keep product out of sewers and watercourses.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP

Spill or Leak Cleanup Procedures: Vacuum or sweep the material into a sealed container. If a vacuum is used it must be dust

explosion-proof. Dispose of in compliance with national, state, regional or provincial

regulations.

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7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Recommendations for Handling: No special precautions when used as intended. Keep containers closed, avoid creating dust.

Keep away from ignition sources.

Advice on General Hygiene: Never eat, drink or smoke in work areas. Practice good personal hygiene after using this

material, especially before eating, drinking, smoking, using the restroom, or applying

cosmetics.

7.2 **CONDITIONS FOR SAFE STORAGE**

Avoid high temperatures, >100°F/32°C

7.3 **SPECIFIC END USES**

Printing devices

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 **CONTROL PARAMETERS**

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release in order to maintain airborne concentrations of the product below OSHA PELs (See Section 3).

Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

8.2 EXPOSURE CONTROLS

Respiratory protection:

IMPROPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134 and 1910.137) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given work conditions, levels of airborne contamination, and sufficient levels of oxygen.

Eye/Face Protection:

Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Hand/Skin Protection:

For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. WARNING! Air purifying respirators do not protect worker in oxygen deficient atmospheres.

Additional Protection:

N/A

Protective Clothing and Equipment:

Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear splashproof chemical goggles and face shield when working with liquid, unless full face piece respiratory protection is worn.

Safety Stations:

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment:

Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment. Never take home contaminated clothing.

Comments:

Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 **DETAIL INFORMATION**

Physical state: APPEARANCE: Form: Powder, Color: Black

Color: N/A

Odor: Odorless.

Odor threshold: Not determined.

Boiling point: Undetermined.

Melting point: Undetermined.

Flash point: N/A

Explosion limits: Lower: Not determined Upper: Not determined

Relative density: Not determined.

Auto-ignition temperature: Product is not self-igniting.

9.2 OTHER INFORMATION

DANGER OF EXPLOSION: Product does not present an explosion hazard in its original state. DENSITY AT 20 °C (68 °F): 1.2 g/cm³ (10.014 lbs/gal); SG: 1.3-1.8. SOLUBILITY IN/ MISCIBILITY WITH WATER: Insoluble. SOLVENT CONTENT: Organic solvents 0.0%; Solids content 100.0%.

10. CHEMICAL STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity Hazards: None

Data on Mixture Substances: None

10.2 **Chemical Stability:** The product is stable. Under normal conditions of storage and use, hazardous

polymerisation will not occur.

10.3 Hazardous Polymerization: Stable under conditions of normal use.

10.4 **Conditions to Avoid:** Keep away from heat, flame, sparks and other ignition sources.

10.5 **Incompatible Materials:** Strong oxidising materials

10.6 Hazardous Decomposition: Will not occur.

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11. INFORMATION ON TOXICOLOGICAL EFFECT

Mixtures: The product is not subject to classification according to internally approved calculation methods

for preparations: When used and handled according to specifications, the product does not have

any harmful effects according to our experience and the information provided to us.

Acute Toxicity: N/A

Skin Corrosion/Irritation: No toxic irritating effect, according to Directive 67/548/EEC or Directive 199/45/EC. **Serious Eye Damage:** No toxic irritating effect, according to Directive 67/548/EEC or Directive 199/45/EC.

Inhalation: N/A

Sensitization: No toxic sensitizing effects known, according to EU Directive 67/548/EEC or Directive 199/45/EC.

Mutagenicity: Ames test Negative (According to the test result of similar composition.)

Carcinogenicity: IARC (International Agency for Research on Cancer): 1333-86-4, Carbon Black (bound), 2B. NTP

(National Toxicology Program): None of the ingredients is listed. OSHA-Ca (Occupational Safety &

Health Administration): None of the ingredients is listed.

Reproductive Toxicity: N/A **STOT - Single Exposure:** N/A **STOT - Multiple Exposure:** N/A Ingestion: N/A **Hazard Class Information:** N/A **Mixture on Market Data:** N/A Symptoms: N/A Delayed/Immediate Effects: N/A Test Data on Mixture: N/A **Not Meeting Classification:** N/A Routes of Exposure: N/A **Interactive Effects:** N/A Absence of Specific Data: N/A Mixture vs Substance Data: N/A

12. ECOLOGICAL INFORMATION

12.1 **Eco toxicity:** Aquatic toxicity: No further relevant information available.

12.2 **Degradability:** No further relevant information available.

12.3 Bioaccumulation Potential: No further relevant information available.

12.4 **Mobility in Soil:** No further relevant information available.

12.5 PBT & vPvB Assessment: N/A

12.6 **Other Adverse Effects:** General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not

allow undiluted product or large quantities of it to reach ground water, water course or sewage

system.

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13. DISPOSAL CONSIDERATIONS

Disposal Information:

Dispose as a solid waste in accordance with local authority regulations.

Empty container retains product residue.

Physical/Chemical Properties that affect Treatment:

Symbol: This product is not classified as dangerous

Risk Phrases: This product is not classified according to the federal, state and local environmental regulations.

Waste Treatment Information:

Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local regulations.

Personal Protection Required:

N/A

14. TRANSPORT INFORMATION

14.1 **ID Number:** Void

14.2 **Shipping Name:** Void

14.3 **Hazard Class:** HMIS Rating: Health = 0 Fire = 0 Reactivity = 0

14.4 Packing Group: Void

14.5 Environmental Hazards: Marine pollutant: No

14.6 User Precautions: N/A14.7 Bulk Transport: N/A

15. REGULATORY INFORMATION

15.1 **Regulatory Information:** TSCA (Toxic Substances Control Act): All ingredients are listed.

EPA Regulatory Information: N/A **CERCLA Reportable Quantity:** N/A

15.2 Superfund Information:

Hazard Categories:

Immediate: N/A
Delayed: N/A

Fire: NFPA Rating: Health = 0 Fire = 0 Reactivity = 0

Pressure: N/A
Reactivity: N/A

Section 302 - Extremely Hazardous: N/A

Section 311 - Hazardous: N/A

15.3 **State Regulations:** Proposition 65, Chemicals known to cause cancer: 1333-86-4, Carbon Black (bound).

15.4 Other Regulatory Information: Carcinogenic categories: EPA (Environmental Protection Agency) - None of the ingredients

is listed; TLV (Threshold Limit Value established by ACGIH) - 1333-86-4, Carbon Black (bound), A4; NIOSH-Ca (National Institute for Occupational Safety and Health) - 1333-86-4,

Carbon Black (bound). A Chemical Safety Assessment has not been carried out.

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16. OTHER INFORMATION

General Comments:

This information is based on our current knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular

application

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Key to Abbreviations and Acronyms used in this sheet:

ACGIH = American Conference of Governmental Industrial	NIOSH = National Institute for Occupational Safety and Health		
Hygienists			
CERCLA = Comprehensive Environmental Response Compensation	OSHA = Occupational Health and Safety Administration		
and Liability Act			
CLP = Classification, Labeling, and Packaging	PEL = Permissible Exposure Limit		
DSD = Dangerous Substances Directive	SCBA = Self Contained Breathing Apparatus		
EPA = Environmental Protection Agency	STOT = Specific Target Organ Toxicity		
GHS = Globally Harmonized System	TLV = Threshold Limit Value		
N/A = Not Applicable	UK = United Kingdom		
NFPA = National Fire Protection Association	UN = United Nations		

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DISCLAIMER

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